

CLAIMS:

1. A display device for displaying information, comprising a plurality of display elements with an electrophoretic medium comprising two groups of electrophoretic particles, one group of positively charged electrophoretic particles and one group of negatively charged particles and the color of the electrophoretic particles of the first group being equal to the

5 color of the electrophoretic particles of the second group,
a first electrode, a second electrode and a third electrode associated with each display element for receiving a drive signal, and

control means for supplying, in accordance with the information to be displayed, the drive signal to the electrodes for realizing intermediate optical states.

10 2. An electrophoretic display device as claimed in claim 1, wherein the information to be displayed comprises successive images and the control means is able to generate a drive signal so that the voltage difference between the first, second electrode and the third electrode respectively is alternately positive and negative in synchronism with the
15 display of each subsequent image.

3. An electrophoretic display device as claimed in claim 1, wherein the control means are further arranged for supplying a preset signal before the drive signal comprising a preset pulse associated with energy sufficient for releasing the electrophoretic particles from
20 a first position near one of the electrodes on the substrates but too low to reach a second position near one of the other electrodes on the substrates.

4. An electrophoretic display device as claimed in claim 3, wherein the preset signal is supplied to one of the first and second electrodes.

25 5. An electrophoretic display device as claimed in claim 4, wherein the control means are further arranged for generating the preset pulse with a negative or positive polarity and the control means are further arranged for generating the drive signal comprising a pulse

with a positive or negative pulse, whereby the polarity of the preset pulse is opposite to the polarity of the pulse of the drive signal.

6. An electrophoretic display device as claimed in claim 3, wherein the preset
5 signal is supplied to the third electrode.

7. An electrophoretic display device as claimed in claim 1, wherein the
electrophoretic medium is present between two substrates one of which comprises the first
and the second electrode, and the other comprises the third electrode.
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8. An electrophoretic display device as claimed in claim 7, wherein the surface of
the substrate comprising the third electrode is provided with a hydrofobic layer.

9. An electrophoretic display device as claimed in claim 1, wherein the
15 electrophoretic medium is present in a micro-capsule.